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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,331	03/29/2004	Shih-Lung Weng	250209-1190	2709
24504	7590	03/07/2006	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP			WRIGHT, INGRID D	
100 GALLERIA PARKWAY, NW			ART UNIT	
STE 1750			PAPER NUMBER	
ATLANTA, GA 30339-5948			2835	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,331

Applicant(s)

WENG ET AL.

Examiner

Ingrid Wright

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-34 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 4-7, 13-15 and 20-34 is/are allowed.
 6) ☐ Claim(s) 1-3, 8-12 and 16-19 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☒ Other: Attachment.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-3,8-12,16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koshika US 67404623 B1.

With respect to claim 1, Koshika teaches (Fig. 8) a electronic device (50) having a first housing (12), a second housing (20) having a front panel (23a) and a side panel (inner wall of compartment (24)), rotatably disposed in the sunken part between a first position and a second position; a display module (23) disposed on the front panel (23a), an elastic device (30) for returning the second housing (20) from the second position to the first position and a second housing (20) having a sunken part, wherein the sunken part includes an inner front wall (not labeled) and an inner side wall (not labeled) and a protrusion (36a) slidably disposed on the side panel (not labeled) of the second housing (20), a first housing (12) having a sunken part, wherein the sunken part includes an inner front wall and an inner side wall (inner wall of compartment (24)), and a guide track (34) disposed on the inner side wall (not labeled) of the first housing (12), wherein the guide track (34) includes a first fixer (26a) and a second fixer (26c), wherein when the second housing (20) is rotated, the protrusion (36a) moves between the first fixer (26a) and the second fixer (26c) along the guide track (34), wherein when the protrusion (36a) is coupled to the first fixer (26a), the second housing (20) is located in the first position, and the display module faces a first direction, and wherein when the protrusion (36a) is

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coupled to the second fixer (26c), the second housing (20) is located in the second position (26a), and the display module faces a second direction, wherein the second housing is pulled by the user to rotate from the second position to the first position so as to move the protrusion to be departed from the second fixer and then to be coupled to the first fixer, the second housing is located in the first position, and the display module faces a first direction and wherein the second housing is pushed by the user to rotate from the first position to the second position so as to move the protrusion to be departed from the first fixer and then to be coupled to the second fixer, the second housing is located in the second position, and the display module faces a second direction.

Koshika lacks a second housing being pushed from a second position to a first position.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the pushing motion over the pulling motion as taught by Koshika, as an alternate equivalent means of rotating the second housing from a second position to a first position.

With respect to claim 2, Kioshika teaches (Fig. 4,5) the elastic device (30) is an axial elastic device, wherein the axial elastic device (30) provides a force for driving the second housing (20) to rotate from the second position to the first position after the protrusion (36a) is decoupled to the second fixer (26c), wherein the elastic device (30), coupled to a bottom surface (20b) and a floor 24a.

Koshika is silent as to the axial elastic device coupled to a side wall and an inner side wall.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to couple the axial elastic device to a side wall and an inner side wall, over the coupling configuration as taught by Koshika, in order to provide an alternate equivalent means of supporting a rotational movement of a second housing.

With respect to claim 3, Koshika teaches (Fig. 4,5) a slide (32) having the protrusion and movably disposed and an elastic spring device (30), one end of which is fixed to the second housing (20) and the other end of which is connected to the bottom of a floor (bottom surface of compartment (24)).

Koshika teaches (Fig. 4,5) a tab (26) rather than a groove formed on the side panel (not labeled) of the second housing (20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the tab with a groove as an alternate means to slide the engagable portion through, in order to provide a slide mechanism to rotate the display module.

With respect to claim 8, Koshika teaches (Fig. 4,5) the second housing (20), which includes another side panel (not labeled) and the sunken part includes another inner side wall (inner wall of compartment (24)), and wherein the another side panel (not labeled) is rotatably coupled to the another inner side wall (inner wall of compartment (24)).

With respect to claim 9, Koshika teaches (Fig. 8) a display module, which is a liquid crystal display module (LCM).

With respect to claim 10, Koshika teaches (Fig. 8) a pivot device (28) for rotating a second housing (20) in a sunken part, wherein the sunken part includes an inner front wall (not labeled) and an inner side wall (not labeled), wherein the second housing (20) includes a front panel (23a) and a side panel (not labeled), wherein the pivot device comprises: an elastic device (30) for returning the second housing (20) rotate from a second position to a first position; a protrusion (36a) slidably disposed on the side panel (not labeled) and a guide track (34)

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disposed on the inner side wall (not labeled), wherein the guide track (34) includes a first fixer (26a) and a second fixer (26c), and wherein when the second housing (20) is rotated, the protrusion (36a) moves between the first fixer (26a) and the second fixer (26c) along the guide track (34), wherein when the protrusion (36a) is coupled to the first fixer (26a), the second housing (20) is located in the first position, and the front panel (23a) faces a first direction, and wherein when the protrusion is coupled to the second fixer (26c), the second housing (20) is located in the second position, and the front panel (23a) faces a second direction, wherein the second housing is pulled by the user to rotate from the second position to the first position so as to move the protrusion to be departed from the second fixer and then to be coupled to the first fixer, the second housing is located in the first position, and the display module faces a first direction and wherein the second housing is pushed by the user to rotate from the first position to the second position so as to move the protrusion to be departed from the first fixer and then to be coupled to the second fixer, the second housing is located in the second position, and the display module faces a second direction.

Koshika lacks a second housing being pushed from a second position to a first position.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the pushing motion over the pulling motion as taught by Kioshika, as an alternate equivalent means of rotating the second housing from a second position to a first position.

With respect to claim 11, Koshika teaches (Fig. 4,5) the elastic device (30), which is an axial elastic device, wherein the axial elastic device (30) couples the side panel and the inner bottom wall (of element (24)) for forming an axle for the second housing (20), wherein the axial elastic device (30) provides a force for driving the second housing (20) to rotate from the second

position to the first position after the protrusion (36a) is decoupled to the second fixer (26c), wherein the elastic device (30), coupled to a bottom surface (20b) and a floor 24a.

Koshika is silent as to the axial elastic device coupled to a side wall and an inner side wall.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to couple the axial elastic device to a side wall and an inner side wall, over the coupling configuration as taught by Koshika, in order to provide an alternate equivalent means of supporting a rotational movement of a second housing.

With respect to claim 12, Koshika teaches (Fig. 4, 5) the pivot device (28), which further comprises a slide (32) having the protrusion (36a) and movably disposed of a flat tab (26); and an elastic spring device (30), one end of which is fixed to the second housing (20), and the other end of which is connected to the surface of (24)).

Koshika teaches (Fig. 4,5) a tab (26) rather than a groove formed on the side panel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the tab with a groove as an alternate equivalent means to slide the engagable portion through, in order to provide a slide mechanism to rotate the display module.

With respect to claim 16, Koshika teaches (Fig. 8) the front panel (23a), which comprises a display module.

With respect to claim 17, Koshika teaches (Fig. 4,5,8) an electronic device (50) comprising a first housing (12) having a sunken part, wherein the sunken part includes an inner front wall (not labeled) and an inner side wall (wall of compartment (24)); a second housing (20) having a front panel (23a) and a side panel (not labeled), rotatably disposed in the sunken part between a first

position and a second position, an elastic device (30) for returning the second housing (20) from the second position to the first position, a protrusion (36a) slidably disposed on the inner side wall (24) of the first housing (12) and a guide track (34) disposed on the side panel (not labeled) of the second housing (20), wherein the guide track (34) includes a first fixer (26a) and a second fixer (26c), and wherein when the second housing (20) is rotated, the protrusion (36a) moves between the first fixer (26a) and the second fixer (26c) along the guide track (34); wherein when the protrusion (36a) is coupled to the first fixer (26a), the second housing (20) is located in the first position, and wherein when the protrusion (36a) is coupled to the second fixer (26c), the second housing (20) is located in the second position, wherein the second housing is pulled by the user to rotate from the second position to the first position so as to move the protrusion to be departed from the second fixer and then to be coupled to the first fixer, the second housing is located in the first position, and the display module faces a first direction and wherein the second housing is pushed by the user to rotate from the first position to the second position so as to move the protrusion to be departed from the first fixer and then to be coupled to the second fixer, the second housing is located in the second position, and the display module faces a second direction.

Koshika lacks a second housing being pushed from a second position to a first position.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the pushing motion over the pulling motion as taught by Kioshika, as an alternate equivalent means of rotating the second housing from a second position to a first position.

With respect to claim 18, Kioshika teaches (Fig. 4,5) the elastic device (30) is an axial elastic device, wherein the axial elastic device (30) provides a force for driving the second housing (20) to rotate from the second position to the first position after the protrusion (36a) is decoupled to

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the second fixer (26c), wherein the elastic device (30), coupled to a bottom surface (20b) and a floor 24a.

Koshika is silent as to the axial elastic device coupled to a side wall and an inner side wall.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to couple the axial elastic device to a side wall and an inner side wall, over the coupling configuration as taught by Koshika, in order to provide an alternate equivalent means of supporting a rotational movement of a second housing.

With respect to claim 19, Koshika teaches (Fig. 4,5) a slide (32) having the protrusion (36a) and movably disposed and an elastic spring device (30), one end of which is fixed to the first housing (12), and the other end of which is connected to the slide.

Koshika teaches (Fig. 4,5) a tab (26) rather than a groove formed on the inner panel of the second housing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a groove over the tab, as taught by Koshika, in order to provide an alternate equivalent means of a slidable support surface.

Allowable Subject Matter

2. Claims 4-7,13-15 & 20-34 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The allowability resides in the overall structure of the device as recited in independent claims because claim 4 recites: "an extending part vertically and internally disposed on the side panel, wherein the extending part has an aperture facing the front panel, and wherein the extending part is connected with the elastic spring device," claim 6 recites: "an ark track partly adjacent to

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the inner front wall of the first housing and having an indentation toward the front of the inner front wall, an slope track disposed in the indentation of the arc track and having an upper end and a lower end, wherein the upper end of the slope track is below and upper end of the arc track and inclined to the inner front wall, and wherein the upper end of the arc track defines the first fixer, and a bar track located between the slope track and the arc track, wherein one end of the bar track is connected with the lower end of the slope track, and the other end of the bar track defines the second fixer," claim 13 recites: "and extending part vertically disposed on the side panel, wherein the extending part has an aperture facing the front panel, wherein the extending part is connected with the elastic spring device," claim 15 recites: "an arc track partly adjacent to the inner front wall and having an indentation toward the front of the inner front wall, an slope track disposed in the indentation of the arc track and having an upper end and a lower end, wherein the upper end of the slope track is below the upper end of the arc track and inclined to the inner front wall, and wherein the upper end of the track defines the first fixer, and a bar track located between the slope track and the arc track, wherein the one end of the bar track is connected with the lower end of the slope track, and the other end of the bar track defines the second fixer," claim 20 recites: " an arc track partly adjacent to the front panel of the second housing and having an indentation toward the front of the front panel, an slope track disposed in the indentation of the arc track and having an upper end, wherein the upper end of the upper slope track is below and upper end of the arc track and inclined to the front panel, and wherein the upper end of the arc track defines the first fixer, and a bar track located between the slope track, wherein one end of the bar track is connected with the lower end of the slope track, and the other end of the bar track defines the second fixer." The aforementioned limitations in combination with all remaining limitations of claims 4-7, 13, 14 & 20-34 are believed to render the claims 4-7, 13, 14 & 20-34 patentable over the art of record.

Response to Arguments

3. In response to the Applicant's arguments, Koshika teaches an operation portion (36b), which requires a pulling action over a pushing action. Although the pulling action is utilized over the pushing, the final result of the action produces a rotation of a LCD from a first position to a second position.

In response to the axial elastic device argument, Koshika teaches the elastic device (30) (see attached fig. 8) is an axial elastic device. Although, the elastic device (30) (see, attached fig. 5B) couples a bottom surface (20b) and a floor 24a, the second housing (20) is capable of being rotated from a second position to a first position.

In response to the guide track and fixer argument, Koshika teaches (see, attached fig. 4,5) a guide track (34) disposed on the inner side wall (not labeled) of the first housing (12), wherein the guide track (34) includes a first fixer (26a) and a second fixer (26c). When the second housing (20) is rotated, the protrusion (36a) moves between the first fixer (26a) and the second fixer (26c) along the guide track (34), when the protrusion (36a) is coupled to the first fixer (26a) (intersected by (36a)).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will

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be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571)272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571)272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IDW

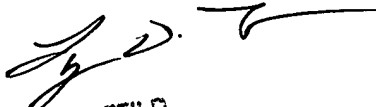

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FIG. 4

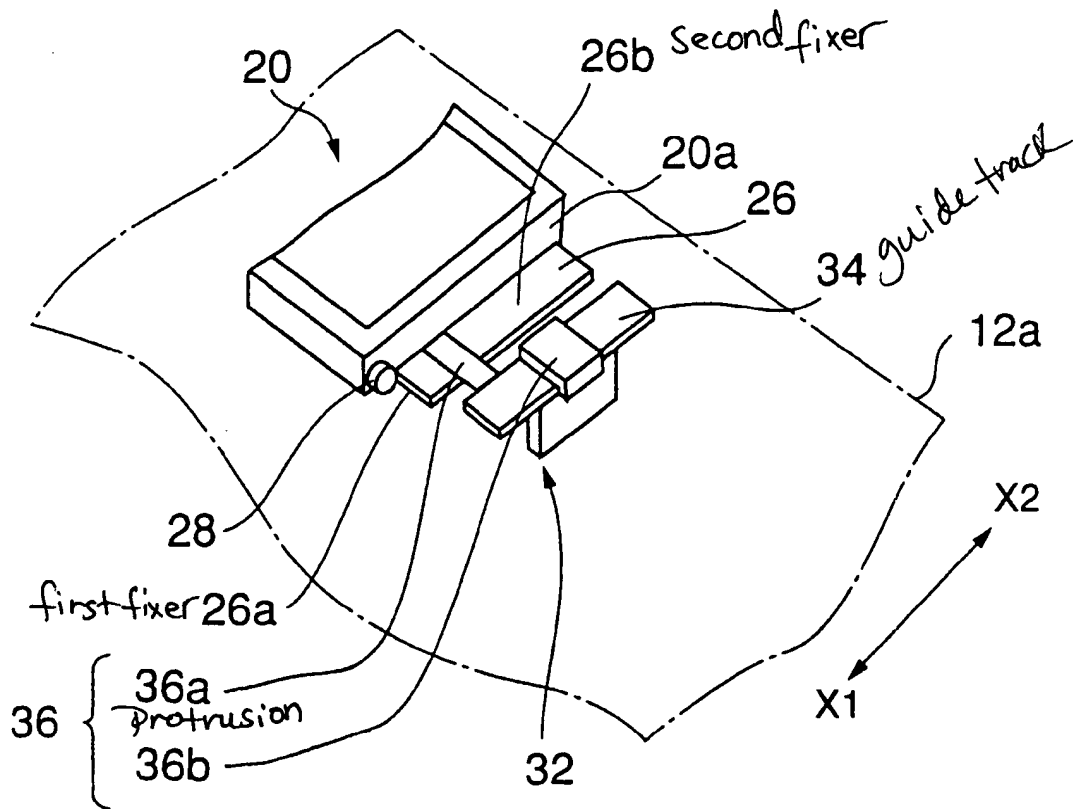


FIG. 5A

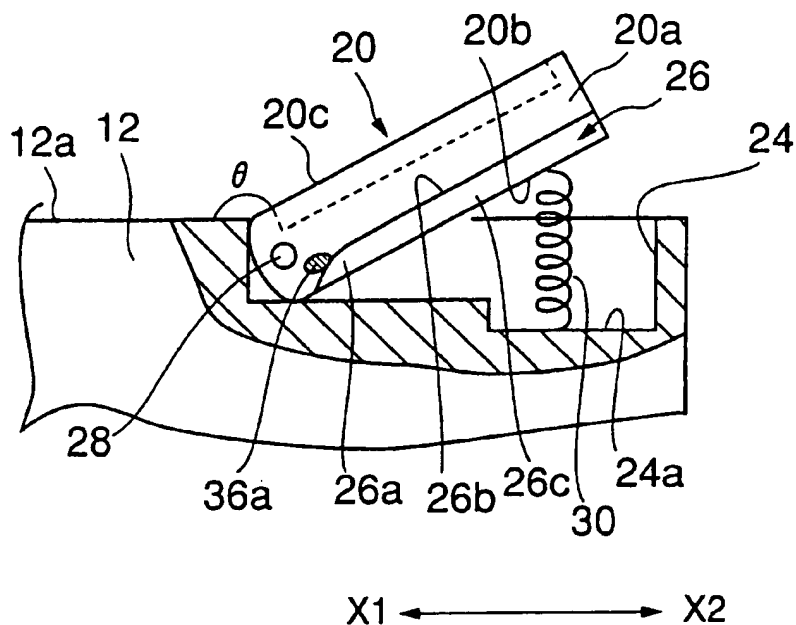


FIG. 5B

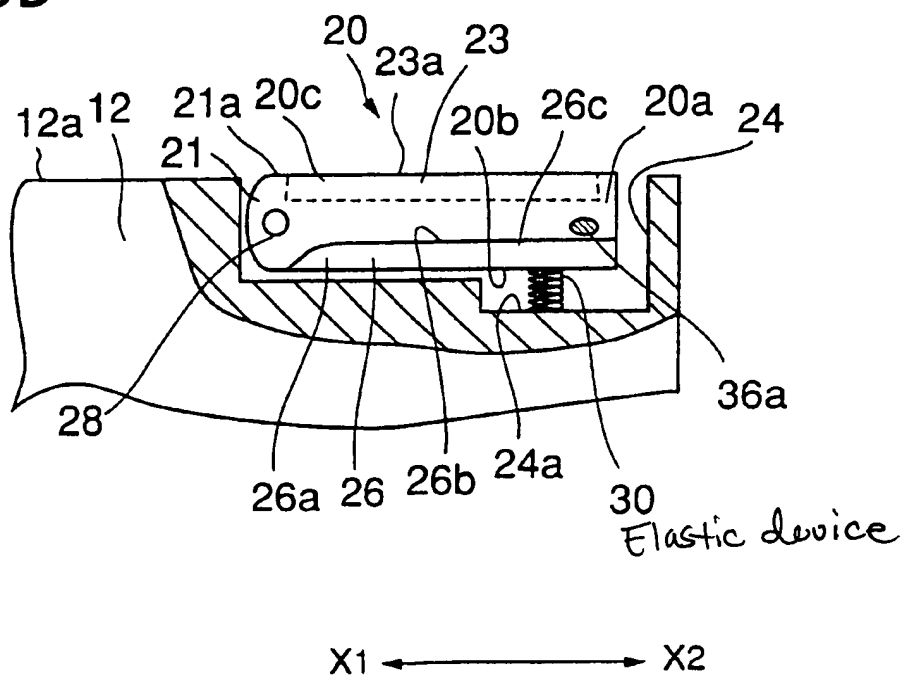


FIG. 8

